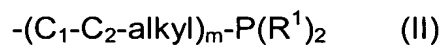


Abstract:

Process for generating $^1\text{O}_2$ in which a ferrocene of the formula



in which Fc is a ferrocene optionally substituted by dimethylaminoethyl, C_1 - C_{12} -alkyl, aryl or carboxyalkyl, n may be 1 or 2 and X is a radical of the formula



where m may be 0 or 1 and R^1 is phenyl, cyclohexyl, tert-butyl, ethyl, isopropyl, methyl, methoxy, ethoxy, phenoxy or butoxy,

is treated in an organic solvent at a temperature of from -80°C to $+20^\circ\text{C}$ with 1 to 4 mol of ozone per mole of ferrocene compound, during which $^1\text{O}_2$ forms, and use thereof for the oxidation of organic substrates which react with $^1\text{O}_2$.